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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,911	03/28/2001	Daniel Crosson	10006946-1	4361

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
VU, THONG H	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/819,911	CROSSON, DANIEL	
	Examiner	Art Unit	
	Thong H Vu	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-28 and new claims 29-52 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 5,18 are rejected under 35 U.S.C. § 103 as being unpatentable over Ramanathan et al [Ramanathan 6,182,136 B1] in view of Macera et al [Macera, 5,490,252].

4. As per claim 1, Ramanathan discloses a method for internet protocol (IP) address selection, comprising the steps of:

assigning a single domain name to a set of server IP addresses, receiving a request for the domain name from a client IP address, retrieving a set of IP routes linking the server IP addresses and the client IP address [Ramanathan, a single domain name and DNS database, col 6 lines 42-64]; and

selecting an IP route from the set of routes which meets predetermined criteria [Macera, select the bus' s data source port and destination port, require using the geographical slot number, col 24 lines 58-63].

However Ramanthan does not explicitly detail selecting an IP route from the set of routes which meets predetermined criteria.

Macera discloses a single logical network using BGP, OSPF, SNMP-MIB to select the source port and destination port [Macera, col 24 lines 58-63]

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a single domain name with routing database for selecting a shortest path with source and destination addresses as taught by Macera into the Ramanathan's apparatus in order to utilize the routing process. Doing so would enhance the capability of routers to handle traffic over Internet.

5. As per claim 2, Ramanathan-Macera disclose retrieving the set of IP routes from a cache database [Macera, a routing database, col 10 lines 8-14].

6. As per claim 3, Ramanathan-Macera disclose retrieving the set of IP routes from an IP routes database [Macera, a different set of addresses fields, source and destination fields, col 24 lines 43-46].

7. As per claim 4, Ramanathan-Macera disclose retrieving the set of IP routes from a set of routers using a BGP protocol [Macera, BPG, OSPF, col 10 lines 15-30;col 17 lines 20-28].

8. As per claims 5,18 Ramanathan-Macera disclose retrieving the set of IP routes from a set of routers using an SNMP protocol [Macera, SNMP, col 17 lines 1-35].

9. As per claim 6, Ramanathan-Macera disclose retrieving the set of IP routes from a set of routers using a Telnet protocol [Ramanathan, FTP, col 24 line 55].

10. As per claim 7, Ramanathan-Macera disclose selecting the IP route from the set which has a shortest AS path (Autonomous System) [Macera, OSPF, col 10 lines 15-30;col 17 lines 20-28].

11. As per claim 8, Ramanathan-Macera disclose selecting the IP route from the set which has a lowest origin type.

12. As per claim 9, Ramanathan-Macera disclose selecting the IP route from the set which has a lowest MED (Multi-Exit-Disc).

13. As per claim 10, Ramanathan-Macera disclose selecting the IP route from the set equal to a default IP address [Macera, default route, col 10 lines 15-30].

14. As per claim 11, Ramanathan-Macera disclose storing the IP routes in a cache database [Macera, a routing database, col 10 lines 8-14].

15. As per claim 12, Ramanathan-Macera disclose storing the IP routes in an IP routes database [Macera, a routing database, col 10 lines 8-14].

16. As per claim 13, Ramanathan-Macera disclose defining an enhanced address resource record, including a domain name [Ramanathan, DNS database, col 4 lines 42-64], a list of corresponding servers and routers, router retrieval parameters, a default client/server IP route [Macera, OSPF, col 10 lines 15-30;col 17 lines 20-28], and timeouts [Macera, timeout, col 16 lines 40].

17. As per claim 14, Ramanathan-Macera disclose transmitting an IP address from the set of server IP addresses which corresponds to the selected IP route [Macera, a different set of addresses fields, source and destination fields, col 24 lines 43-46].

18. As per claim 29, Ramanathan-Macera disclose the client IP address corresponds to a client and the set of server IP addresses correspond to respective servers, wherein the set of IP routes comprises IP routes from the client to respective servers, and wherein selecting the IP route comprises selecting the IP route corresponding to the server that satisfies the predetermined criteria [Macera, a different set of addresses fields, source and destination fields, col 24 lines 43-46].

19. As per claim 30, Ramanathan-Macera disclose selecting the IP route to the server associated with a shortest path from the client [Macera, OSPF, col 10 lines 15-30;col 17 lines 20-28].

20. As per claim 31, Ramanathan-Macera disclose the assigning, receiving, retrieving, and selecting acts are performed by a domain name system (DNS) server [Ramanathan, DNS server, col 6 lines 42-64].

21. As per claim 32, Ramanathan-Macera disclose retrieving a set of IP routes where each IP route is defined by at least two IP addresses [Ramanathan, discover information about the source and destination ports or addresses and the host locations for TCP connections or routes, col 27 lines 40-50].

22. As per claim 33, Ramanathan-Macera disclose prior to retrieving the set of IP routes, checking a database in a cache to find an IP route entry containing an IP route previously indicated as being a best IP route; and in response to finding the IP route entry in the cache, using the IP route previously indicated as being the best IP route as the selected IP route [Macera, OSPF or Open Shortest Path First, col 10 lines 15-30;col 17 lines 20-28].

23. As per claim 34, Ramanathan-Macera disclose retrieving the set of IP routes is performed from an IP routes database, and wherein retrieving the set of IP routes from

the IP routes database is in response to determining that the IP route entry is not present in the cache [Macera, a different set of addresses fields, source and destination fields, col 24 lines 43-46].

24. As per claim 35, Ramanathan-Macera disclose accessing a field in a record, the field to indicate one of plural techniques for downloading IP routes from routers to the DNS server; and based on the technique identified by the field, establish one or more sessions (links) with the routers to download IP routes from the routers into an IP routes database in the DNS server, wherein retrieving the set of IP routes is performed from the IP routes database [Ramanathan, DNS database, col 6 lines 42-64;different network links, col 21 lines 18-45].

25. As per claim 36, Ramanathan-Macera disclose establishing one or more Border Gateway Protocol (BGP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of BGP retrieval [Macera, BGP, col 10 lines 15-30;col 17 lines 20-28].

26. As per claim 37, Ramanathan-Macera disclose establishing one or more Simple Network Management Protocol (SNMP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Management Information Base (MIB) retrieval [Ramanathan, SNMP-MIB, col 25 line 57-67].

27. As per claim 38, Ramanathan-Macera disclose establishing one or more Telnet sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Telnet retrieval [Ramanathan, FTP, col 24 line 55].

28. As per claim 39, Ramanathan-Macera disclose establishing one of plural different types of sessions (links) corresponding to the one of plural techniques specified by the field to download IP routes from the routers into the IP routes database [Ramanathan, different network links, col 21 lines 18-45].

29. As per claim 25, Ramanathan-Macera disclose A system for Intemet protocol (IP) address selection comprising:

a set of servers, having a single domain name [Ramanathan, single domain name, col 6 lines 42-64]; a client computer [Ramanathan, col 1 lines 15-30];

a set of routers, coupled to the servers and the client computer, for storing IP routes between the servers and the client [Macera, OSPF or Open Shortest Path First, col 10 lines 15-30;col 17 lines 20-28]; and

a domain name system server, coupled to the routers, for downloading the IP routes from the routers for storage in an IP routes database [Ramanathan, DNS server, col 6 lines 42-64], and in response to a query containing the domain name received from the client computer selecting one of the IP routes contained in the IP routes

database which meets predetermined criteria [Macera, select the bus' s data source port and destination port, require using the geographical slot number, col 24 lines 58-63].

30. As per claim 27, Ramanathan-Macera disclose a cache databse, coupled to the domain name server for storing previously selected IP routes [Macera, a routing database, col 10 lines 8-14].

31. As per claim 27, Ramanathan-Macera disclose the IP routes database is for storing all of the IP routes [Macera, a routing database, col 10 lines 8-14].

32. As per claim 28, Ramanathan-Macera disclose a domain name system server includes an enhanced address resource record storing the single domain name, a list of the servers and routers, a set of router retrieval parameters, a default IP router [Macera, OSPF, col 10 lines 15-30;col 17 lines 20-28], and timeouts [Macera, timeout, col 16 lines 40]; and the domain name system server accesses the retrieval parameters in order to select the IP routes [Ramanathan, DNS server, col 6 lines 42-64].

33. Claims 15-24;40-48 contain similar limitations set forth in claims 1-14,29-39. Therefore claims 15-24,40-48 are rejected for the same rationale set forth in claims 1-14,29-39.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (571) 272-3896. The fax number for the organization where this application or proceeding is assigned is 703-872-9306

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Thong Vu
Patent Examiner
Art Unit 2142